Preface

N.G.

Nader G.

Abraham

New York, N.Y.

This volume, based on the 9th Symposium of Molecular Biology of Hematopoiesis, is dedicated to John W. Adamson, MD, Tadamitsu Kishimoto, MD, Robert C. Gallo, MD, Arthur W. Nienhuis, MD and Franco Man-delli, MD, for their invaluable contributions to our current knowledge in the field of hematopoiesis. At the meeting, Richard Champlin presented up-to-date information on stem cells and T cell depletion for bone marrow transplants. A clinical update on thrombopoietin was provided by Pamela Hunt of Amgen and by Kenneth Kaushansky. Arthur Nienhuis' and Katherine Turner's contributions to current knowledge and advances in the fields of growth factors and gene transfer were also recognized during the 9th Symposium on the Molecular Biology of Hematopoiesis in Genoa. Other articles presented here cover such diverse areas as preclinical and clinical experience with growth factors and positive and negative regulatory molecules, advances in understanding the mechanisms leading to leukemias and their treatment with interferon (work by Professor Sante Tura and his colleagues), and the elucidation of the genetic structures of key growth factors such as interleukin (IL)-12 and IL-11, which will lead to new insights into understanding the regulation of hematopoiesis and applying this knowledge clinically.

Retrovirus gene transfer techniques and genetic manipulation of murine and human cells have added new information about the regulatory steps involved in cell development and genetic disorders. Transfection of eukaryotic cells, specifically bone marrow cells and, subsequently, in vivo transplantation further suggest that hematopoietic reconstitution is possible. Gene transfer studies continue to reveal the mechanisms behind the various biological events leading to normal and abnormal cell proliferation and differentiation. The origin and isolation of stem cells, as well as the use of cord blood, for bone marrow transplants are also discussed. Enthusiasm for the discovery of new growth factors and interleukins remains strong as novel factors are introduced into the field. Exciting data are being generated linking growth factors and neuroendocrine molecules to proto-oncogene activation and cell proliferation and differentiation. And we can expect more data to accrue, in particular with respect to cell surface receptors, the mechanisms shutting off local production of growth factors, and possible clinical side effects of their long-term administration.

This volume contains a selection of papers presented at the 9th Symposium of Molecular Biology of Hematopoiesis in Genoa. We are sure it will be informative and of great interest to all readers.

KARGER © 1996 S. Karger AG, Basel

155

E-Mail karger@karger.ch Fax + 41 61 306 12 34